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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,147	10/28/2003	Chien-Hua Chen	10005237-3	5327

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

NGUYEN, TAI V

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/695,147

Applicant(s)

CHEN ET AL.

Examiner

Tai Van Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-38 is/are pending in the application.
- 4a) Of the above claim(s) 27-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10, 11, 13, 17-19, 21 and 23-25 is/are rejected.
- 7) ☒ Claim(s) 12, 14, 20, 22 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 10/003,600.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/28/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of the invention Group I, claims 10-26 in the reply filed on 12/21/2005 is acknowledged.
2. Claims 27-38 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected the invention Group II, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 12/21/2005.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
4. The following title is suggested: A METHOD OF FABRICATING A FLUID EJECTION DEVICE.

Applicant is reminded of the proper content of an abstract of the disclosure.

5. A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

- Where applicable, the abstract should include the following:
- (1) if a machine or apparatus, its organization and operation;
 - (2) if an article, its method of making;
 - (3) if a chemical compound, its identity and use;
 - (4) if a mixture, its ingredients;
 - (5) if a process, the steps.**

Extensive mechanical and design details of apparatus should not be given.

6. The abstract of the disclosure is objected to because the abstract is not drawn to the claimed invention. i. e, method. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 10, 11, 13, 18, 19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugitani et al (US 4,509,063).

A applied to claim 10, 11 and 13, Sugitani et al disclose a method of fabricating a fluid ejection device comprising: bonding a top surface of a first substrate (1, Fig. 4) to a bottom surface of a second substrate (5), wherein a patterned (6P) etch mask layer (6) is formed on at least one of the top surface of the first substrate and the bottom surface of the second substrate; and etching a fluid channel in the first and second substrate extending through an opening in the patterned etch mask layer (column 4, lines 25-40+).

As applied to claims 18, 19 and 21, Sugitani et al disclose a method of fabricating a fluid channel for a fluid ejection device comprising: bonding a top surface of a first substrate (1, Fig. 4) to a bottom surface of a second substrate (5), wherein the top surface of the first substrate has a feed trench (7-4), etching a feed hole from a top surface of the second substrate to the top surface of the first substrate (sequence Fig. 4-5), and removing a remaining portion of the first substrate to form a fluid channel through the substrates (column 6, lines 1-15+).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 15-17 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugitani et al in view of Tom (US 6,342,401).

As applied to claims 15-17 and 23-25, Sugitani et al disclose all of the limitations of the claimed invention except that fluid a channel is formed using a wet and dry etching.

However, Tom teaches forming a fluid channel using a wet and dry etching process (column 2, lines 18-31). It would have been obvious to one of ordinary skill in the art at this time the invention was made to have modified the method of Sugitani et al by including performing dry and wet etching treatment, as taught by Tom, to positively

provide precision micro-machining of channel structures in resistive substrate (see column 4, lines 55-56).

Allowable Subject Matter

11. Claims 12, 14, 20, 22 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tai Van Nguyen whose telephone number is 571-272-4567. The examiner can normally be reached on M-F (7:30 A.M - 4:30 P.M).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN.
December 28, 2005



A. DEXTER TUGBANG
PRIMARY EXAMINER